The Real Story About MPEG-4 Visual Licensing

Session 723

The Real Story About MPEG-4 Visual Licensing

Frank Casanova
Director, QuickTime Product Marketing

The Real Story About MPEG-4 Visual Licensing

*This presentation is for information purposes only.
Actual license agreements provide the only definitive
and reliable statement of license terms.

Larry Horn
Vice President, Licensing and Business Development
MPEG LA, LLC
lhorn@mpegla.com

A Lot Has Been Said…

MPEG LA®

A Lot Has Been Written (most of it to me)…

MPEG LA®

What's With the MPEG-4 Visual License and How Does It Affect You?

MPEG LA®

Today I’m Going to Explain

MPEG LA®

But First, Some Background…

MPEG LA®

MPEG LA: In the Beginning

- Born out of core international digital video compression standard known as MPEG-2
- Single biggest challenge to MPEG-2's adoption was dealing with the essential intellectual property rights
- Many patents owned by many patent holders created potential for confusion, conflict, and cost
- MPEG LA provided the solution
- One-stop standards-based patent licenses are MPEG LA's business

MPEG LA®

MPEG LA: What Problem Does It Solve?

- Expansion of broad technology standards
  - "The Patent Thicket"*
  - Growing interdependence among patents
  - Growing numbers of patents, narrower claims
  - Multiple patent owners
- License transaction costs are burdensome
- Technological advance, adoption, and use impeded
- Freedom of movement restricted
- Potential for conflict increased
- One-on-one licensing arrangements fall short

MPEG LA®

*Carl Shapiro, Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standard Setting (March 2001). http://haas.berkeley.edu/~shapiro/thicket.pdf

MPEG LA: How Does It Solve the Problem?

- Fair, reasonable, nondiscriminatory worldwide access to essential patents owned by multiple patent owners under one license
- Objective: to include as much IP as possible for marketplace convenience
- Balances reasonable access for users with reasonable return to patent holders
- Enables worldwide implementation, interoperability, and use of fundamental technologies

MPEG LA®

MPEG LA: Current Programs Under License

- MPEG-2 licensing began July 1997
  - Started with 8 Licensers, now 22
  - Began with 25 patent families, now 123 (575+ patents in 56 countries)
  - More than 570 Licensees covering every market sector
- 1394 LA® licensing organized Nov 1999 (IEEE 1394)
  - 8 Licensors
  - More than 220 Licensees
- DVB LA® licensing program organized July 2001 (DVB-T)
- MPEG-4 Visual License issued 25 Nov 2002, MPEG-4 Systems License issued 4 February 2003

1394 LA & Design ® and DVB LA & Design ® are registered trademarks of MPEG LA, LLC.

MPEG LA®

M4Visual License: What Does It Cover?

- MPEG-4 Visual Standard profiles covered by Portfolio patents: Simple, core, main, simple scalable, N-bit, basic animated texture, scalable texture, simple FA, advanced real time simple, core scalable, advanced coding efficiency, advanced core, advanced scalable texture, simple FBA, hybrid, advanced simple, fine granularity scalable, simple studio and/or core studio profiles
- As defined in ISO/IEC 14496-2:2001 [Part 2 Visual dated 2001-12-01], 14496-2:2001/Amd.1:2002 [Studio profile dated 2002-02-01], or 14496-2:2001/Amd.2:2002 [Streaming video profile dated 2002-02-01]

MPEG LA®

M4Visual License: How is it Covered?

- Each patent is essential to the MPEG-4 Visual standard
- Evaluated by independent patent experts
- Worldwide coverage
- Patent holders include all essential patents
- More in the pipeline: new patent holders and essential patents may be added at no additional royalty

MPEG LA®

M4Visual License: Current Patent Holders

- Canon, Inc.
- Curitel Communications, Inc.
- France Télécom
- Fujitsu
- GE
- General Instrument
- Hitachi
- KDDI
- Matsushita
- Microsoft
- Mitsubishi
- Oki
- Philips
- Samsung
- Sanyo
- Sharp
- Sony
- Telenor
- Toshiba
- Victor Company of Japan (JVC)

MPEG LA®

M4Visual License: In a Nutshell

- Manufacturers pay royalties for the right to make and sell decoders and encoders
- Personal use and end-user to end-user communications are covered as part of manufacturer's license
- Video providers do not pay royalties unless M4Visual material is provided for remuneration (direct or indirect, but not including self-advertising/promotion)
- If M4Visual material is provided for remuneration, then Video Providers pay royalties for the right to use the decoders and encoders

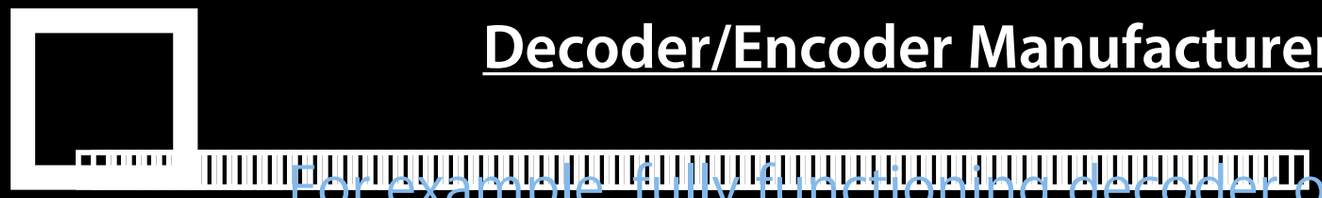
MPEG LA®

M4Visual License: Objectives

- Align with real-world flow of MPEG-4 commerce by apportioning reasonable royalties consistent with the value chain, the technology, and the market
  - Royalty follows revenue
  - Use across different business models (Consumer Recorded Video Internet, Mobile Video, Unique Use, Stored Video)
  - Caps to provide cost predictability
  - Threshold levels to encourage early-stage adoption and minimize impact on lower volume users
  - Alternative royalty options, some requiring no royalty reports

MPEG LA®

M4Visual License: Examples



Decoder/Encoder Manufacturer

For example, fully functioning decoder or encoder software provided for a computer

Stored Video

Consumer Recorded Video

Internet Video

Unique Use Video

US $0.25/$0.25
$1M/ $1M Caps
50,000/50,000
Unit Thresholds

MPEG LA®

M4Visual License: Examples

Decoder/Encoder Manufacturer

Internet Video

Mobile Video

End User to End User Use

US $0.25/$0.25
$1M/ $1M Caps
50,000/50,000
Unit Thresholds

US $0.25/$0.25
$1M/ $1M Caps
50,000/50,000
Unit Thresholds

MPEG LA®

M4Visual License: Examples

Stored Video Transmitter/Replicator

Internet Video Provider

Unique Use (Cable/Satellite Service Provider)

- Royalties are (a) additive and (b) paid by every video provider (service provider in Unique Use) that offers video for remuneration

---

- Internet Video Use: $0.25/sub w/$1M annual cap or $0.000333/min w/$1M annual cap or paid-up $1M annual fee 50,000 subscriber annual threshold
- Unique Use: $1.25 per decoder at earlier of (i) providing decoder to an End User or (ii) providing Video to Decoder

---

- Stored Video Use: $.01/30 min to $.04/movie; $.005/30 min to $.02/movie > 5 yr; $.002 for 12 min or less

M4Visual License: Examples

Mobile Video Provider

Internet Video Provider

Stored Video Transmitter

- Royalties are (a) additive and (b) paid by every video provider that offers video for remuneration
- For (each) Internet and Mobile use $0.25/sub w/$1M annual cap or $0.000333/min w/$1M annual cap or Paid-up $1M annual fee 50,000 subscriber annual threshold
- Stored Video Use: $.01/30 min to $.04/movie; $.005/30 min to $.02/movie > 5 yr; $.002 for 12 min or less

MPEG LA®

M4Visual License:
Other Important Provisions

- Most Favorable Royalty Rates
- Licensee data is protected as confidential
- Grant-back on essential patents similar in scope to license grants

MPEG LA®

I welcome your questions.
If you would like a copy of the License,
please let us know.

For more information, please visit www.mpegla.com.

MPEG LA®

Larry Horn
Vice President, Licensing
lhorn@mpegla.com

Dean Skandalis
Director, Licensing
dskandalis@mpegla.com

+1-301-986-6660 tel
+1-301-986-8575 fax
www.mpegla.com

Wrap Up

Roadmap—Thursday

	The Mission	Haight/ Ashbury	SOMA
9:00		723 The Real Story About MPEG-4 Visual Licensing	724 What's New With QuickTime VR?
10:30		725 QuickTime and Enhanced CDs	726 Cutting-Edge Projects Using QuickTime VR
12:00			
2:00	727 QuickTime Streaming Server Programming	728 Produce a Listening Party With QuickTime	729 Industrial-Strength Encoding
3:30		FF011 QuickTime Feedback Forum	
5:00			

Moved *to* Marina

Roadmap—Friday

	Pacific Heights	Haight/ Ashbury
9:00		
10:30	730 QuickTime Alternative Programming Environments	
12:00		
2:00	731 Internet Application Development: The New Frontier	
3:30		
5:00		

Who to Contact

Larry Horn
Vice President, Licensing and Business Development
lhorn@mpegla.com

Dean Skandalis
Director, Licensing
dskandalis@mpegla.com

Guillermo Ortiz
QuickTime Technology Manager
quicktimeman@apple.com

MPEG LA®

http://developer.apple.com/wwdc2003/urls.html

For More Information

Documentation

General Information

http://www.apple.com/quicktime

Developer Information

http://developer.apple.com/documentation

QuickTime Information

http://developer.apple.com/QuickTime

Do Not Miss!

Lab: QuickTime Content Creation

Meet with QuickTime content experts for daily content specific topics that are of special interest to you. Bring your own media and Powerbook. No appointment is needed—first-come, first-served.

Sacramento Room

Lab: QuickTime Development

Meet with Apple's QuickTime engineers. Each day will emphasize a specific QuickTime development topic. Bring your own code and Powerbook. No appointment is needed—first-come, first-served.

Sacramento Room

Lab Hours

Monday	12:00pm to 6:00pm
Tuesday	9:00am to 6:00pm
Wednesday	9:00am to 6:00pm
Thursday	9:00am to 4:30pm
Friday	9:00am to 6:00pm

Q&A

Frank Casanova

Director, QuickTime Product Marketing

http://developer.apple.com/wwdc2003/urls.html

WWDC 2003

Worldwide Developers Conference